

CLAIMS

1. A localization method of a mobile station (2) communicating with at least one central server (1) through a wireless network comprising a plurality of wireless radio-frequency transmitting access points (3), among which a first  
5 access point is chosen to perform the communication, comprising the steps of:

measuring the signal strengths received by said station from the plurality of access points;

storing each measured strength with an address identifying the corresponding connected access point;  
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comparing said stored strengths to values of a predetermined table of signal strength thresholds affected to access points, defining one or more event zones (EZ) each comprising one or more attenuation ranges of one or more access points; and

15 considering the station as located in a given event zone if the measured strength corresponding to an access point defining that event zone is comprised in the attenuation range of that access point.

2. The localization method of claim 1, in which said  
20 attenuation ranges are a function of the environment and of the shape of the event zones (EZ).

3. A communication method between at least one mobile station (2) and at least one central server (1) through radio-frequency transmitting access points (3) to which said station  
25 is wireless connectable, comprising the steps of:

establishing a communication between said station and said central server through a first of said access points from which said station receives the highest signal strength;

comparing the signal strength received by said station  
30 from at least one second access point with respect to at least one signal strength threshold used for defining at least one event zone (EZ) in which at least one specific application of the server is to be available if said station is present in said event zone; and

making available for said mobile station said specific application if the station is considered in the event zone.

4. The method of claim 3, in which said station is considered to be in the event zone if the received signal  
5 strength is lower than said threshold.

5. The method of claim 3, in which said station is considered to be in the event zone if the received signal strength is higher than said threshold.

6. The method of claim 3, in which the station is  
10 considered as being in the event zone by applying the localization method of claim 1 or 2.

7. The method of claim 3, in which the communication are made according to one of the following unregulated spectrum standard suites : 802.11, 802.11a, 802.11b, 802.11e, 802.11f,  
15 802.11g, 802.11h, 802.15.1, 802.15TG2, 802.15TG3, 802.15TG4, Bluetooth, Wi-Fi, HiperLAN1, HiperLAN2 .

8. A communication system between at least one mobile station (2) and at least one central server (1) through radio-frequency transmitting access points (3) to which the station is  
20 wireless connectable, comprising:

means to define, with at least a signal strength threshold of at least one access point, at least one event zone (EZ) in which at least one specific application of the server is to be available to the station if present in that zone;

25 means to localize the mobile station with respect to the event zone boundary, based on the signal strength received by the station from the access points.

9. The system of claim 8, in which the localization of the mobile station is performed by said central server (1) on  
30 the basis of a table defining each event zone (EZ) by attenuation range(s) around one or more access points (3).

10. The system of claim 8, further comprising means to implement the communication method of any of claim 3 to 7.